

CD/DVD Player

Operating Instructions

For customers in the U.S.A Owner's Record

The model and serial numbers are located at the rear of the unit. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No.	DVP-NS90V
Serial No	

For Customers in Canada

If this product is not working properly, please call 1-877-602-2008 for **Peace of Mind Warranty Replacement service.**

For other product related questions please contact our **Customer Information Service Centre** at 1-877-899-7669 or write to us at: Customer Information Service 115 Gordon Baker Road, Toronto, Ontario, M2H 3R6











DVP-NS90V

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WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

The AC power cord must be changed only at a qualified service shop.

CAUTION

The use of optical instruments with this product will increase eye hazard. As the laser beam used in this CD/DVD player is harmful to eyes, do not attempt to disassemble the cabinet.

Refer servicing to qualified personnel only.





This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage"

within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and

maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.



Disposal of Old Electrical & Electronic Equipment
This symbol is applicable only in the European Union and other European countries with separate collection systems.

Note

This equipment has been tested and found to comply with the limits for a Class B digital device. pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions. may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Notes About the Discs

 To keep the disc clean, handle the disc by its edge. Do not touch the surface.





- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight as the temperature may rise considerably inside the car.
- After playing, store the disc in its
 case
- Clean the disc with a cleaning cloth.

Wipe the disc from the center out.



- Do not use solvents such as benzine, thinner, commercially available disc/lens cleaners, or anti-static spray intended for vinyl LPs.
- If you have printed the disc's label, dry the label before playing.

Important Safeguards

For your protection, please read these safety instructions completely before operating the appliance, and keep this manual for future reference. Carefully observe all warnings, precautions and instructions on the appliance, or the one described in the operating instructions and adhere to them.

Use

Power sources

This set should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of electrical power supplied to your



home, consult your dealer or local power company. For those sets designed to operate from battery power, or other sources, refer to the operating instructions.

Grounding or Polarization

This set is equipped with a polarized ac power cord plug (a plug having one blade wider than the other), or with a three-wire grounding type plug (a plug having a third pin for grounding). Follow the instructions below:

For the set with a polarized AC power cord plua:

This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to have a suitable outlet installed. Do not defeat the safety purpose of the polarized plug by forcing it in.

For the set with a three-wire grounding type AC plug:

This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the



outlet, contact your electrician to have a suitable outlet installed. Do not defeat the safety purpose of the grounding plug.

Overloading

Do not overload wall outlets, extension cords or convenience receptacles beyond their capacity, since this can result in fire or electric shock.



Object and Liquid Entry

Never push objects of any kind into the set through openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the set.



Attachments

Do not use attachments not recommended by the manufacturer, as they may cause hazards.



Cleaning

Unplug the set from the wall outlet before cleaning or polishing it. Do not use liquid cleaners or aerosol cleaners. Use a cloth lightly dampened with water for cleaning the exterior of the set



Installation

Water and Moisture

Do not use power-line operated sets near water - for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.



Power-Cord Protection

Route the power cord so that it is not likely to be walked on or pinched by items placed upon or against them, paying particular



attention to the plugs, receptacles, and the point where the cord exits from the appliance.

Accessories

Do not place the set on an unstable cart, stand, tripod, bracket, or table. The set may fall, causing serious injury to a



child or an adult, and serious damage to the set. Use only a cart stand tripod, bracket, or table recommended by the manufacturer.

An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



Ventilation

The slots and openings in the cabinet are provided for necessary ventilation. To ensure reliable operation of the set, and to protect it from overheating, these slots and openings must never be blocked or covered.

· Never cover the slots and openings with a cloth or other materials



Never block the slots and openings by placing the set on a bed, sofa, rug or other similar surface.



 Never place the set in a confined space, such as a bookcase, or built-in cabinet, unless proper ventilation is provided.



 Do not place the set near or over a radiator or heat register, or where it is exposed to direct sunlight.

• When the pordamaged or f

Antennas

Outdoor antenna grounding

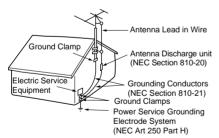
If an outdoor antenna or cable system is installed, follow the precautions below.

An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can come in contact with such power lines or circuits.

WHEN INSTALLING AN OUTDOOR ANTENNA SYSTEM, EXTREME CARE SHOULD BE TAKEN TO KEEP FROM CONTACTING SUCH POWER LINES OR CIRCUITS AS CONTACT WITH THEM IS ALMOST INVARIABLY FATAL.

Be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

Antenna Grounding According to the National Electrical Code



NEC-NATIONAL ELECTRICAL CODE

Lightning

For added protection for this set during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the set due to lightning and powerline surges.

Service

Damage Requiring Service

Unplug the set from the wall outlet and refer servicing to qualified service personnel under the following conditions:

 When the power cord or plug is damaged or frayed.



CRACKED PLUG

 If liquid has been spilled or objects have fallen into the



 If the set has been exposed to rain or water.



 If the set has been subject to excessive shock by being dropped, or the cabinet has been damaged.



 If the set does not operate normally when following the operating instructions. Adjust only those controls that are specified in the



operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the set to normal operation.

• When the set exhibits a distinct change in performance - this indicates a need for service.

Servicing

Do not attempt to service the set yourself as opening or removing covers may expose you to dangerous voltage or other hazards.



Refer all servicing to qualified service personnel.

Replacement parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original parts.

Unauthorized substitutions may result in fire, electric shock, or other hazards.

Safety Check

Upon completion of any service or repairs to the set, ask the service technician to perform routine safety checks (as specified by the manufacturer) to determine that the set is in safe operating condition.



Precautions

On safety

- To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus.
- Should any solid object or liquid fall into the cabinet, unplug the player and have it checked by qualified personnel before operating it any further.

On power sources

- The player is not disconnected from the AC power source as long as it is connected to the wall outlet, even if the player itself has been turned off.
- If you are not going to use the player for a long time, be sure to disconnect the player from the wall outlet. To disconnect the AC power cord, grasp the plug itself; never pull the cord.

On placement

- Place the player in a location with adequate ventilation to prevent heat build-up in the player.
- Do not place the player on a soft surface such as a rug.
- Do not place the player in a location near heat sources, or in a place subject to direct sunlight, excessive dust, or mechanical shock.
- Do not install the player in an inclined position. It is designed to be operated in a horizontal position only.
- Keep the player and the discs away from equipment with strong magnets, such as microwave ovens, or large loudspeakers.
- Do not place heavy objects on the player.

On operation

- If the player is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the player. Should this occur, the player may not operate properly. In this case, remove the disc and leave the player turned on for about half an hour until the moisture evaporates.
- When you move the player, take out any discs. If you don't, the disc may be damaged.

On adjusting volume

Do not turn up the volume while listening to a section with very low level inputs or no audio signals. If you do, the speakers may be damaged when a peak level section is played.

On cleaning

Clean the cabinet, panel, and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

On cleaning discs, disc/lens cleaners Do not use a commercially available cleaning disc or disc/lens cleaner (wet or spray type). These may cause the apparatus to malfunction.

IMPORTANT NOTICE

Caution: This player is capable of holding a still video image or on-screen display image on your television screen indefinitely. If you leave the still video image or on-screen display image displayed on your TV for an extended period of time you risk permanent damage to your television screen. Plasma display panel televisions and projection televisions are susceptible to this.

If you have any questions or problems concerning your player, please consult your nearest Sony dealer.

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About This Manual

- Instructions in this manual describe the controls on the remote. You can also use the controls on the player if they have the same or similar names as those on the remote.
- "DVD" may be used as a general term for DVD VIDEOs, DVD+RWs/DVD+Rs and DVD-RWs/DVD-Rs.
- The meaning of the icons used in this manual is described below:

Icons	Meaning
DVD Video	Functions available for DVD VIDEOs and DVD+RWs/DVD+Rs in +VR mode or DVD-RWs/DVD-Rs in video mode
DVDvr	Functions available for DVD-RWs/DVD-Rs in VR (Video Recording) mode
VCD	Functions available for VIDEO CDs (including Super VCDs or CD-Rs/CD-RWs in video CD format or Super VCD format)
CDSuper	Functions available for Super Audio CDs
CD	Functions available for music CDs or CD-Rs/CD-RWs in music CD format
DATA CD	Functions available for DATA CDs (CD-ROMs/CD-Rs/CD-RWs) containing MP3* audio tracks, and JPEG image files
DATA DVD	Functions available for DATA DVDs (DVD-ROMs/DVD+RWs/DVD+Rs/DVD-Rs) containing MP3* audio tracks, and JPEG image files

^{*} MP3 (MPEG-1 Audio Layer III) is a standard format defined by ISO (International Organization for Standardization)/IEC (International Electrotechnical Commission) MPEG which compresses audio data.

This Player Can Play the **Following Discs**



"DVD+RW," "DVD-RW," "DVD+R," "DVD-R," "DVD VIDEO," and "CD" logos are trademarks.

Note about CDs/DVDs

The player can play CD-ROMs/CD-Rs/CD-RWs recorded in the following formats:

- music CD format
- video CD format
- MP3 audio tracks and JPEG image files of format conforming to ISO 9660* Level 1/ Level 2. or its extended format, Joliet
- KODAK Picture CD format
- * A logical format of files and folders on CD-ROMs, defined by ISO (International Organization for Standardization).

The player can play DVD-ROMs/ DVD+RWs/DVD-RWs/DVD+Rs/DVD-Rs recorded in the following format:

- MP3 audio tracks and JPEG image files of format conforming to UDF (Universal Disk Format).

Example of discs that the player cannot play

The player cannot play the following discs:

- CD-ROMs/CD-Rs/CD-RWs other than those recorded in the formats listed on this page.
- CD-ROMs recorded in PHOTO CD format.
- Data part of CD-Extras.
- DVD Audio discs.

Also, the player cannot play the following

- · A DVD VIDEO with a different region code.
- · A disc recorded in a color system other than NTSC, such as PAL or SECAM (this player conforms to the NTSC color system).
- A disc that has a non-standard shape (e.g., card, heart).
- A disc with paper or stickers on it.
- A disc that has the adhesive of cellophane tape or a sticker still left on it.

Region code

Your player has a region code printed on the back of the unit and only will play DVD VIDEOs (playback only) labeled with identical region codes. This system is used to protect copyrights.

DVD VIDEOs labeled | will also play on this player.



If you try to play any other DVD VIDEO, the message "Playback prohibited by area limitations." will appear on the TV screen. Depending on the DVD VIDEO, there may be no region code indication, even though playing the DVD VIDEO is prohibited by area restrictions.



Notes

Notes about DVD+RWs/DVD+Rs, DVD-RWs/ DVD-Rs or CD-Rs/CD-RWs

Some DVD+RWs/DVD+Rs, DVD-RWs/DVD-Rs, or CD-Rs/CD-RWs cannot be played on this player due to the recording quality or physical condition of the disc, or the characteristics of the recording device and authoring software. The disc will not play if it has not been correctly finalized. For more information, refer to the operating instructions for the recording device. Note that some playback functions may not work with some DVD+RWs/DVD+Rs, even if they have been correctly finalized. In this case, view the disc by normal playback. Also some DATA CDs/DATA DVDs created in Packet Write format cannot be played.

Music discs encoded with copyright protection technologies

This product is designed to playback discs that conform to the Compact Disc (CD) standard. Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not conform to the CD standard and may not be playable by this product.

· Note on DualDiscs

A DualDisc is a two sided disc product which mates DVD recorded material on one side with digital audio material on the other side.

However, since the audio material side does not conform to the Compact Disc (CD) standard, playback on this product is not guaranteed.

Note on playback operations of DVDs and VIDEO CDs

Some playback operations of DVDs and VIDEO CDs may be intentionally set by software producers. Since this player plays DVDs and VIDEO CDs according to the disc contents the software producers designed, some playback features may not be available. Also, refer to the instructions supplied with the DVDs or VIDEO CDs.

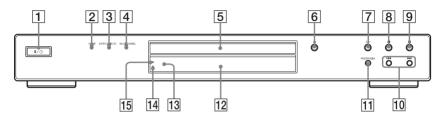
Copyrights

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

Index to Parts and Controls

For more information, see the pages indicated in parentheses.

Front panel



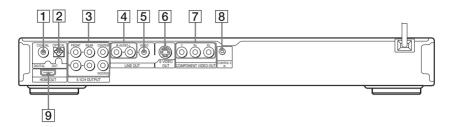
- 1 / (on/standby) button (28)
- [2] HDMI* (High-Definition Multimedia Interface) indicator (19, 70, 73, 82)
 Lights up when the HDMI OUT jack is correctly connected to a HDCP (Highbandwidth Digital Content Protection) compliant device with HDMI or DVI (Digital Visual Interface) input.
- 3 SUPER AUDIO CD indicator (32, 83) Lights up when:
 - playing a HD (High Density) layer of Super Audio CDs.
 - no disc is inserted.
- 4 MULTI CHANNEL indicator (32, 83) Lights up when:
 - playing a disc that contains multiple audio signal channels.
 - no disc is inserted.
- **5** Disc tray (28)
- \bigcirc \bigcirc (open/close) button (28)
- **7** (play) button (28)

- **8 ■** (pause) button (29)
- **9** (stop) button (29)
- 10 | (previous/next) buttons (38)
- TI PROGRESSIVE button/indicator (21)
 Lights up when the player outputs
 progressive signals.
- 12 Front panel display (12)
- Remote sensor (17)
- 14 FL OFF (Front panel display off) indicator (72)
- 15 VIDEO OFF indicator (28)
- * This player is based on version 1.1 of High-Definition Multimedia Interface Specifications.

This DVD player incorporates High-Definition Multimedia Interface (HDMITM) technology.

HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

Rear panel

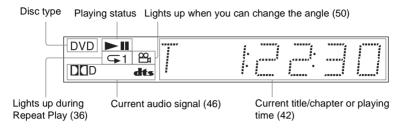


- 1 DIGITAL OUT (COAXIAL) jack (22)
- 2 DIGITAL OUT (OPTICAL) jack (22)
- **3** 5.1CH OUTPUT jacks (22)
- 4 LINE OUT L/R (AUDIO) jacks (22)
- 5 LINE OUT (VIDEO) jack (18)

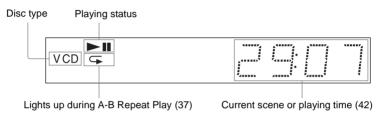
- 6 S VIDEO OUT jack (18)
- **7** COMPONENT VIDEO OUT jacks $(18)(Y, P_B, P_R)$
- 8 CONTROL S IN jack (18)
- **9** HDMI OUT (high-definition multimedia interface out) jack (18)

Front panel display

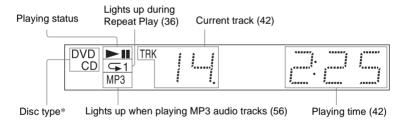
When playing back a DVD VIDEO/DVD-VR mode disc



When playing back a VIDEO CD with Playback Control (PBC) (33)



When playing back a Super Audio CD, CD, DATA CD/DATA DVD (MP3 audio) or VIDEO CD (without PBC)

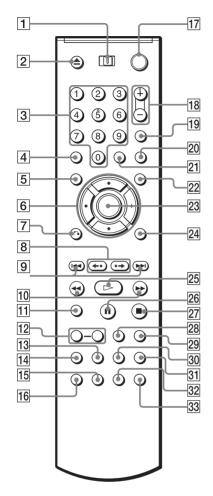


^{*} When playing DATA DVDs, the DVD indicator is displayed. When playing the HD layer of Super Audio CDs, the disc type is not displayed.

Ϋ́ Hint

You can adjust the lighting of the front panel display by setting "DISPLAY" in "CUSTOM SETUP." (page 72)

Remote



- 1 TV/DVD switch (42)
- 2 ▲ OPEN/CLOSE button (29)
- Number buttons (31)
 The number 5 button has a tactile dot.*
- 4 CLEAR button (34)
- **5** TOP MENU button (31)
- **6 ←**/**↑**/**↓**/**→** buttons (31)
- 7 RETURN button (29)
- 8 ←• ◀II/•→ II► REPLAY/STEP/ ADVANCE/STEP buttons (29, 39)

- 9 PREV/NEXT (previous/next) buttons (29)
- to scan/slow buttons (39) ► SCAN/slow
- [11] ZOOM button (29, 59)
- 12 SLOW PLAY/FAST PLAY buttons (29)
- **13** SA-CD/CD button (32)
- 14 SA-CD MULTI/2CH button (32)
- 15 SUBTITLE button (50)
- **16** AUDIO button (45)
- 17 1/(¹) (on/standby) button (28)
- 18 VOL (volume) +/- buttons (65) The + button has a tactile dot.*
- 19 TV/VIDEO/TIME/TEXT button (42)
- **20** PICTURE NAVI (picture navigation) button (41, 59)
- 21 ENTER button (65)
- **22** MENU button (31)
- 23 ENTER button (25)
- 24 DISPLAY button (14)
- 25 ► PLAY button (28)
 The ► button has a tactile dot.*
- **26 II** PAUSE button (29)
- **27** STOP button (29)
- **28** SHUFFLE button (34)
- **29** REPEAT button (34)
- **30** SUR button (46)
- 31 SEARCH MODE button (39)
- 32 ANGLE button (50)
- 33 VIDEO ON/OFF button (28)

^{*} Use the tactile dot as a reference when operating the player.

Guide to the Control Menu Display

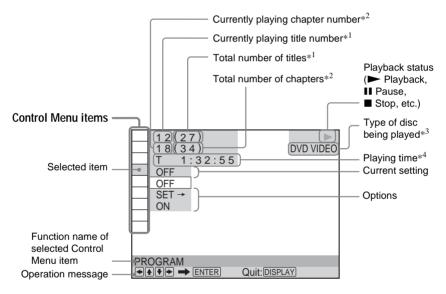
Use the Control Menu to select a function and to view related information. Press DISPLAY repeatedly to turn on or change the Control Menu display as follows:



Control Menu display

The Control Menu display 1 and 2 will show different items depending on the disc type. For details about each item, see the pages in parentheses.

Example: Control Menu display 1 when playing a DVD VIDEO.



- *1 Displays the scene number for VIDEO CDs (PBC is on), track number for VIDEO CDs/ Super Audio CDs/CDs, album number for DATA CDs/DATA DVDs.
- *2 Displays the index number for VIDEO CDs/ Super Audio CDs, MP3 audio track number or JPEG image file number for DATA CDs/DATA DVDs.
- *3 Displays Super VCD as "SVCD."
- *4 Displays the date for JPEG files.

To turn off the display

Press DISPLAY repeatedly.

List of Control Menu items

lt a see	troi Menu items
Item	Item Name, Function
	TITLE (page 39)/SCENE (page 39)/TRACK (page 39) Selects the title, scene or track to be played.
	CHAPTER (page 39)/INDEX (page 39) Selects the chapter or index to be played.
D	TRACK (page 39) Selects the track to be played.
	ORIGINAL/PLAY LIST (page 31) Selects the type of titles (DVD-RW/DVD-R in VR mode) to be played, the ORIGINAL one, or an edited PLAY LIST.
	TIME/TEXT (page 40) Checks the elapsed time and the remaining playback time. Input the time code for picture and music searching. Displays the DVD/Super Audio CD/CD text or the DATA CD/DATA DVD track/file name.
■ Ech	MULTI/2CH (page 32) Selects the playback area on Super Audio CDs when available.
	PROGRAM (page 34) Selects the title, chapter or track to play in the order you want.
I Sa	SHUFFLE (page 36) Plays the title, chapter or track in random order.
	REPEAT (page 36) Plays the entire disc (all titles/all tracks/all albums) repeatedly or one title/chapter/track album repeatedly.
	A-B REPEAT (page 37) Specifies the parts you want to play repeatedly.
■ BNR	BNR (page 53) Adjusts the picture quality by reducing the "block noise" or mosaic like patterns that appear on your TV screen.
■ MNR	MNR (page 53) Adjusts the picture quality by reducing the faint noise appearing around the outlines of the images.
	CUSTOM PICTURE MODE (page 51) Adjusts the video signal from the player. You can select the picture quality that best suits the program you are watching.
	SHARPNESS (page 52) Exaggerates the outline of the image to produce a sharper picture.
	AV SYNC (page 55) Adjust the delay between the picture and sound.
	PARENTAL CONTROL (page 62) Set to prohibit playback on this player.
	SETUP (page 68) QUICK Setup (page 25) Use Quick Setup to choose the desired language of the on-screen display, the aspect ratio of the TV, the audio output signal and the size of the speaker you are using. CUSTOM Setup In addition to the Quick Setup setting, you can adjust various other settings. RESET Returns the settings in "SETUP" to the default setting.

	ALBUM (page 56) Selects the album to be played.
	FILE (page 39) Selects the JPEG image file to be played.
	DATE (page 59) Displays the date the picture was taken by a digital camera.
	INTERVAL (page 61) Specifies the duration for which the slides are displayed on the screen.
	EFFECT (page 61) Selects the effects to be used for changing slides during a slide show.
GATA	MODE (MP3, JPEG) (page 60) Selects the data type; MP3 audio track (AUDIO), JPEG image file (IMAGE) or both (AUTO) to be played when playing a DATA CD or DATA DVD.

Ϋ́ Hint

The Control Menu icon indicator lights up in green when you select any item except "OFF" ("PROGRAM," "SHUFFLE," "REPEAT," "A-B REPEAT," "BNR," "MNR," "CUSTOM PICTURE MODE," "SHARPNESS" only). The "ORIGINAL/PLAY LIST" indicator lights up in green when you select "PLAY LIST" (default setting). The "MULTI/2CH" indicator lights up in green when you select the multi-channel playback area on a Super Audio CD. The "AV SYNC" indicator lights up in green when set to more than 0 ms.

Hooking Up the Player

Follow steps 1 to 6 to hook up and adjust the settings of the player.

Notes

- Plug cords securely to prevent unwanted noise.
- Refer to the instructions supplied with the components to be connected.
- · You cannot connect this player to a TV that does not have a video input jack.
- Be sure to disconnect the power cord of each component before connecting.

Step 1: Unpacking

Check that you have the following items:

- Audio/Video cord (phono plug \times 3 \longleftrightarrow phono plug \times 3) (1)
- Remote commander (remote) (1)
- Size AA (R6) batteries (2)

Step 2: Inserting Batteries Into the Remote

You can control the player using the supplied remote. Insert two Size AA (R6) batteries by matching the \oplus and \ominus ends on the batteries to the markings inside the compartment. When using the remote, point it at the remote sensor \blacksquare on the player.



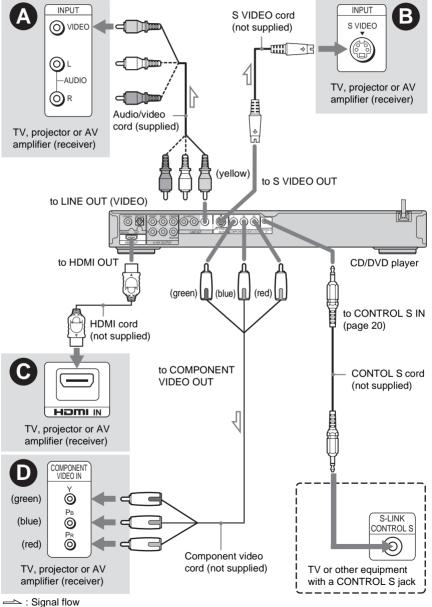
Notes

- · Do not leave the remote in an extremely hot or humid place.
- Do not drop any foreign object into the remote casing, particularly when replacing the batteries.
- Do not expose the remote sensor to direct light from the sun or a lighting apparatus. Doing so may cause a malfunction.
- If you do not use the remote for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

Step 3: Connecting the Video Cords/HDMI Cords

Connect this player to your TV monitor, projector or AV amplifier (receiver) using a video cord. Select one of the patterns **(a)** through **(b)**, according to the input jack on your TV monitor, projector or AV amplifier (receiver).

In order to view progressive signal 480p (525p) pictures with a compatible TV, projector or monitor, you must use pattern **①**. Select pattern **②** when connecting to a TV, projector or AV amplifier (receiver) equipped with HDMI input.



If you are connecting to a video input jack

Connect the yellow plug of an audio/video cord (supplied) to the yellow (video) jack. You will enjoy standard quality images.

With this connection, select "NORMAL (INTERLACE)" (default) by pressing the PROGRESSIVE button on the front panel.



If you are connecting to an S VIDEO input jack

Connect an S VIDEO cord (not supplied). You will enjoy high quality images. With this connection, select "NORMAL (INTERLACE)" (default) by pressing the PROGRESSIVE button on the front panel.



9 If you are connecting to an HDMI/DVI input jack

Use a certified Sony HDMI cord (not supplied) to enjoy high quality digital picture and sound through the HDMI OUT jack.

Note that Super Audio CD sound is not output from the HDMI OUT jack.



To connect to a TV with DVI input

Use an HDMI-DVI converter cord (not supplied). The DVI jack will not accept any audio signals, so you have to use another audio connection in addition to this connection (page 22). Furthermore, you cannot connect the HDMI OUT jack to DVI jacks that are not HDCP compliant (e.g., DVI jacks on PC displays).

• If you are connecting to a monitor, projector, or AV amplifier (receiver) having component video input jacks (Y, PB, PR)

Connect the component via the COMPONENT VIDEO OUT jacks using a component video cord (not supplied) or three video cords (not supplied) of the same kind and length. You will enjoy accurate color reproduction and high quality images.

If your TV accepts progressive 480p (525p) format signals*, use this connection and press the PROGRESSIVE button on the front panel to output progressive signals. For details, see "Using the PROGRESSIVE button" (page 21).



^{*} The active number of progressive scan lines is 480, and the measured number of lines is 525.

When connecting to a wide screen TV

Depending on the disc, the image may not fit your TV screen. To change the aspect ratio, see page 70.

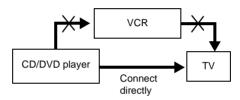
Ϋ́ Hint

If your TV has a CONTROL S jack, you can control the player by operating the remote toward the TV. This feature is convenient when you placed the player and the TV away from each other. After connecting the player with other components according to the above (a), (b), (c) or (c), connect the TV via the CONTROL S IN jack using a control S cord (not supplied). Refer to the instructions supplied with the TV to be connected. Note that your TV's input will not automatically switch to this player when you play a disc.



Notes

• Do not connect a VCR, etc., between your TV and the player. If you pass the player signals via the VCR, you may not receive a clear image on the TV screen. If your TV has only one audio/video input jack, connect the player to this jack.



• If the picture appears too white when you are using **©** or **①** connection, set "BLACK LEVEL" in "SCREEN SETUP" to "OFF" (page 71).

Using the PROGRESSIVE button

By using the PROGRESSIVE button on the front panel, you can select the signal format in which the player outputs video signals (Progressive or Interlace), and the conversion method for progressive signals. The PROGRESSIVE indicator lights up when the player outputs progressive signals.

Each time you press PROGRESSIVE, the display changes as follows:

PROGRESSIVE AUTO



PROGRESSIVE VIDEO



NORMAL (INTERLACE)

◆PROGRESSIVE AUTO

Select this setting when:

- your TV accepts progressive signals, and
- the TV is connected to the COMPONENT VIDEO OUT jacks.

Normally select this under the above condition. This automatically detects the software type, and selects the appropriate conversion method.

Note that the picture will not be clear or no picture will appear if you select these settings when either of the above conditions is not met.

♦PROGRESSIVE VIDEO

Select this setting when:

- your TV accepts progressive signals, and,
- the TV is connected to the COMPONENT VIDEO OUT jacks, and,
- you want to fix the conversion method to PROGRESSIVE VIDEO for video-based software. Select this if the image is not clear when you select PROGRESSIVE AUTO.

Note that the picture will not be clear or no picture will appear if you select these settings when either of the above conditions is not met.

♦NORMAL (INTERLACE)

Select this setting when:

- your TV does not accept progressive signals, or,
- your TV is connected to jacks other than the COMPONENT VIDEO OUT jacks (LINE OUT (VIDEO) or S VIDEO OUT).

You cannot select this setting while the HDMI indicator is lit.

About DVD software types and the conversion method

DVD software can be divided into two types: film-based software and video based software. Video-based software is derived from TV, such as dramas and sit-coms, and displays images at 30 frames/60 fields per second. Film-based software is derived from film and displays images at 24 frames per second. Some DVD software contains both video and film.

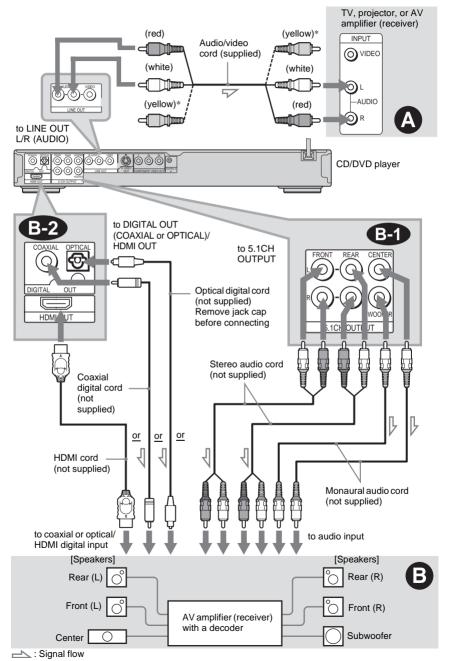
In order for these images to appear natural on your screen when output in progressive format, the progressive signals need to be converted to match the type of DVD software that you are watching.

Notes

- When you play video-based software in progressive signal format, sections of some types of images may
 appear unnatural due to the conversion process when output through the COMPONENT VIDEO OUT
 jacks. Images from the S VIDEO OUT and LINE OUT (VIDEO) jacks are unaffected as they are output in
 the normal (interlace) format.
- When using LINE OUT (VIDEO) or S VIDEO OUT, the picture may appear to flicker each time the PROGRESSIVE button on the front panel is pressed (Interlace switches to Progressive or vice versa).

Step 4: Connecting the Audio Cords

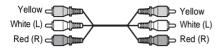
Select one of the following patterns (A), (B-1) or (B-2), according to the input jack on your TV monitor, projector, or AV amplifier (receiver). This will enable you to listen to sound.



^{*} The yellow plug is used for video signals (page 18).

A Connecting to audio L/R input iacks

This connection will use your TV's or stereo amplifier's (receiver's) two speakers for sound. Connect using the audio/video cord (supplied).



• Surround effect (page 47) TV: Dynamic Theater, Dynamic, Wide, Night



Stereo amplifier (receiver): Standard, Night



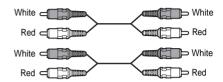
B Connecting to an AV amplifer (receiver) with 5.1 ch input jacks and/or a digital audio input jack

If your AV amplifier (receiver) has 5.1 channel inputs, use **B-1**. If you want to use the Dolby Digital*1, or DTS*2 decoder function on your AV amplifier (receiver), connect to its digital jack using (B-2). With the following connections, you can enjoy a more realistic audio presence in the comfort of your own home.

B-1: Connecting to the 5.1 ch input jacks

You can enjoy 5.1 ch surround sound using the internal Dolby Digital, DTS or Super Audio CD Multi decoder of this player. Connect using the stereo audio cord or monaural audio cord (not supplied).

Stereo audio cord



Monaural audio cord



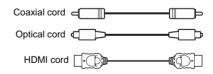
· Surround effect Dolby Digital (5.1ch), DTS (5.1ch), Super Audio CD Multi channel



(B-2): Connecting to a digital audio input jack

If your AV amplifier (receiver) has a Dolby Digital or DTS decoder and a digital input jack, use this connection.

Connect using a coaxial or optical digital cord/HDMI cord (not supplied).



· Surround effect Dolby Digital (5.1ch), DTS (5.1ch)



- *1 Manufactured under license from Dolby Laboratories. "Dolby," "Pro Logic," and the double-D symbol are trademarks of Dolby Laboratories.
- *2 Manufactured under license from Digital Theater Systems, Inc. U.S. Pat. No's. 5,451,942; 5,956,674; 5,974,380; 5,978,762; 6,226,616; 6,487,535 and other U.S. and worldwide patents issued and pending. "DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc. Copyright 1996, 2003 Digital Theater Systems, Inc. All Rights Reserved.

ొ Hints

• For connection B-2

For correct speaker location, refer to the operating instructions of the connected components.

- To enhance the sound performance:
- Use high-performance speakers.
- Use front, rear, and center speakers of the same size and performance.
- Place the subwoofer between the left and right front speakers.
- Use connection B-2 when connecting to 7 or more speakers (6.1 ch or more).

Notes

For connection B-2

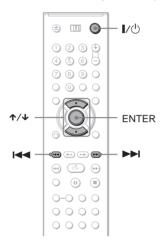
- After you have completed the connection, be sure to set "DOLBY DIGITAL" to "DOLBY DIGITAL" and "DTS" to "DTS" in Quick Setup (page 25).
- When you connect an amplifier (receiver) that conforms to the 96 kHz sampling frequency, set "48kHz/96kHz PCM" in "AUDIO SETUP" to "96kHz/24bit" (page 75).
- Super Audio CD audio signals are not output from the DIGITAL OUT (COAXIAL or OPTICAL)/ HDMI OUT jack.
- The surround sound effects of this player cannot be used with this connection.
- When you connect the player to an AV amplifier (receiver) using an HDMI cord, you will need to do one of the following:
- Connect the AV amplifier (receiver) to the TV with the HDMI cord.
- Connect the player to the TV with a video cord other than HDMI cord (component video cord, S VIDEO cord, or audio/video cord).

Step 5: Connecting the Power Cord

Plug the player and TV power cords into an AC outlet.

Step 6: Quick Setup

Follow the steps below to make the minimum number of basic adjustments for using the player. To skip an adjustment, press ►►. To return to the previous adjustment, press ►►.

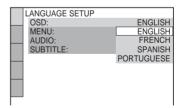


- Turn on the TV
- 2 Press **I**/(¹).
- 3 Switch the input selector on your TV so that the signal from the player appears on the TV screen.

"Press [ENTER] to run QUICK SETUP" (press enter to run Quick Setup) appears at the bottom of the screen. If this message does not appear, select "QUICK" under "SETUP" in the Control Menu to run Quick Setup (page 69).

4 Press ENTER without inserting a disc.

> The Setup Display for selecting the language used in the on-screen display appears.

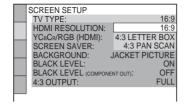


5 Press **↑**/**↓** to select a language.

The player displays the menu and subtitles in the selected language.

6 Press ENTER.

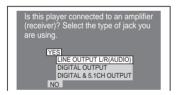
The Setup Display for selecting the aspect ratio of the TV to be connected appears.



- 7 Press ★/◆ to select the setting that matches your TV type.
 - ◆ If you have a 4:3 standard TV
 - 4:3 LETTER BOX or 4:3 PAN SCAN (page 70)
 - ◆ If you have a wide-screen TV or a 4:3 standard TV with a wide-screen mode
 - 16:9 (page 70)

8 Press ENTER.

The Setup Display for selecting the type of jack used to connect your amplifier (receiver) appears.



9 Press ★/↓ to select the type of jack (if any) you are using to connect to an amplifier (receiver), then press ENTER.

If you did not connect an AV amplifier (receiver), select "NO," then go to step 19.

If you connected an AV amplifier (receiver) using just an audio cord, select "YES: LINE OUTPUT L/R (AUDIO)," then go to step 19.

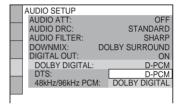
If you connected an AV amplifier (receiver) using a digital coaxial or optical/HDMI cord, select "YES: DIGITAL OUTPUT."

Setup Display for "DOLBY DIGITAL" appears.

If you connected an AV amplifier (receiver) using an audio cord, select "YES: DIGITAL & 5.1CH OUTPUT." The Setup Display for "DOLBY DIGITAL" appears.

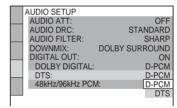
10Press ★/↓ to select the type of Dolby Digital signal you wish to send to your amplifier (receiver).

If your AV amplifier (receiver) has a Dolby Digital decoder, select "DOLBY DIGITAL." Otherwise, select "D-PCM."



11 Press ENTER.

"DTS" is selected.



12Press ★/↓ to select whether or not you wish to send a DTS signal to your amplifier (receiver).

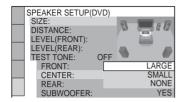
If your AV amplifier (receiver) has a DTS decoder, select "DTS." Otherwise, select "D-PCM."

13 Press ENTER.

- ◆ When "DIGITAL OUTPUT" is selected in step 9
- Quick Setup is finished and connections are complete.
- ◆ When "DIGITAL & 5.1CH OUTPUT" is selected in step 9
- The Setup Display for "SPEAKER SETUP" appears.

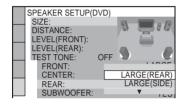
14Press ★/◆ to select the size of the center speaker.

If no center speaker is connected, select "NONE" (page 76).



15 Press ENTER.

"REAR" is selected.

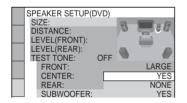


16Press ★/♣ to select the size of the rear speakers.

If no rear speaker is connected, select "NONE."

17 Press ENTER.

"SUBWOOFER" is selected.



18Press ★/↓ to select whether or not you have connected a subwoofer.

19_{Press ENTER.}

Quick Setup is finished. All connections and setup operations are complete.

Note

If you run Quick Setup, any settings stored by "PLAYBACK MEMORY" in "CUSTOM SETUP" (page 72) may return to the default settings.

Playing Discs

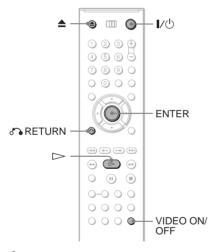
Playing Discs DVDvideo DVDvR

VCD CDSuper CD DATA CD

DATA DVD

Depending on the DVD or VIDEO CD, some operations may be different or restricted. Refer to the operating instructions supplied with your disc.

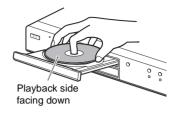




- **1** Turn on your TV.
- **2** Press I/Ů.

The player turns on.

- 3 Switch the input selector on your TV so that the signal from the player appears on the TV screen.
 - ◆ When using an amplifier (receiver)
 Turn on the amplifier (receiver) and
 select the appropriate channel so that you
 can hear sound from the player.



5 Press ⊳.

The disc tray closes. The player starts playback (continuous play). Adjust the volume on the TV or the amplifier (receiver).

Depending on the disc, a menu may appear on the TV screen. For DVD VIDEOs, see page 31. For VIDEO CDs, see page 33.

To enjoy the clarity of Super Audio CD/CD sound more

You can minimize the effect of the video output by switching it off.
Press VIDEO ON/OFF, so that the VIDEO

OFF indicator lights up on the player.
To cancel the setting, press VIDEO ON/OFF again.

To turn off the player

Press 1/1. The player enters standby mode.

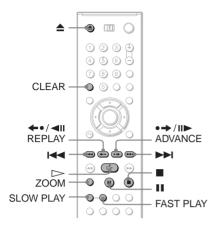
Ϋ́Hin

You can have the player turn off automatically whenever you leave it in stop mode for more than 30 minutes. To turn this function on or off, set "AUTO POWER OFF" in "CUSTOM SETUP" to "ON" or "OFF" (page 72).

Notes

- Discs created on DVD recorders must be correctly finalized before they can be played. For more information about finalizing, refer to the operating instructions supplied with the DVD recorder.
- Super Audio CD audio signals are not output from the DIGITAL OUT (COAXIAL or OPTICAL)/ HDMI OUT jacks.
- The VIDEO ON/OFF function is not effective when you use the HDMI connection.

Additional operations



То	Operation
Stop	Press
Pause	Press II
Resume play after pause	Press II or ▷
Go to the next chapter, track or scene in continuous play mode	Press >>1
Go back to the previous chapter, track or scene in continuous play mode	Press ►
Stop play and remove the disc	Press 📤
Replay the previous scene*1	Press ← ◆ ◀II REPLAY during playback
Briefly fast forward the current scene* ²	Press •→ II► ADVANCE during playback
Magnify the image*3	Press ZOOM repeatedly. Press

^{*1} DVD VIDEOs/DVD-RWs/DVD-Rs only *2 DVD VIDEOs/DVD-RWs/DVD-Rs/

CLEAR to cancel.

DVD+RWs/DVD+Rs only

Note

You may not be able to use the Replay or Advance function with some scenes.

Playback quickly or slowly with sound

You can listen to dialog or sound while playing the current scene quickly or slowly.

During playback, press FAST PLAY or SLOW PLAY.

The speed changes when you press either FAST PLAY or SLOW PLAY

To return to normal playback Press >.

Notes

- You can only use this function with DVDs/ VIDEO CDs/Super VCDs and DVD-RWs/DVD-Rs in VR mode only.
- · "Operation not possible" will appear when maximum or minimum speed is reached.
- · During Fast Play or Slow Play mode, you cannot change the angle (page 50), subtitle (page 50), or sound (page 45). The sound can only be changed for VIDEO CDs/Super VCDs.
- · Fast Play and Slow Play functions do not work when playing DTS sound tracks.
- · You cannot use Fast Play or Slow Play functions when playing a still picture on DVD-RW/DVD-R in VR mode.

Locking the disc tray (Child Lock)

You can lock the disc tray to prevent children from opening it.

When the player is in standby mode, press RETURN, ENTER and then I/(1) on the remote.

The player turns on and "LOCKED" appears on the front panel display. The \triangleq and \triangleq buttons on the player or the remote do not work while the Child Lock is set.

To unlock the disc tray

When the player is in standby mode, press ♂ RETURN, ENTER and then 🗥 again.

Note

Even if you select "RESET" under "SETUP" in the Control Menu (page 69), the disc tray remains locked.

^{*3} Video and JPEG pictures only (except BACKGROUND pictures). You can move the enlarged picture using **←/**↑/**↓/**→. Depending upon the contents of the disc, the zoom function may be canceled automatically when the picture is moved.

Resuming Playback From the Point Where You Stopped the Disc (Multi-disc

Resume) DVDvideo VCD

The player stores the point where you stopped the disc for up to 40 discs and resumes playback the next time you insert the same disc. If you store a resume playback point for the 41st disc, the resume playback point for the first disc is deleted.



1 While playing a disc, press ■ to stop playback.

"RESUME" appears on the front panel display.

2 Press ⊳.

The player starts playback from the point where you stopped the disc in step 1.

Ϋ́ Hint

To play from the beginning of the disc, press \blacksquare twice, then press \triangleright .

Notes

- "MULTI-DISC RESUME" in "CUSTOM SETUP" must be set to "ON" (default) for this function to work (page 73).
- The point where you stopped playing is cleared when:
- you change the play mode.
- you change the settings on the Setup Display.
- For DVD-RWs/DVD-Rs in VR mode, CDs, Super Audio CDs, DATA CDs, and DATA DVDs the player remembers the resume playback point for the current disc.

The resume point is cleared when:

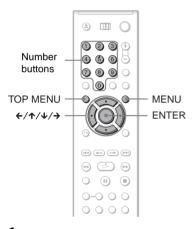
- you opened the disc tray.
- you disconnect the power cord (Super Audio CD, CD or DATA CD/DATA DVD only).
- the player enters standby mode (DATA CD/ DATA DVD only).
- Resume Play does not work during Shuffle Play and Program Play.
- · This function may not work with some discs.
- If "MULTI-DISC RESUME" in "CUSTOM SETUP" is set to "ON" and you playback a recorded disc such as DVD-RW, the player may playback other recorded discs from the same resume point. To play from the beginning, press
 - \blacksquare twice and then press \triangleright .

Using the DVD's Menu

DVDVideo

A DVD is divided into long sections of a picture or a music feature called "titles." When you play a DVD which contains several titles, you can select the title you want using the TOP MENU button.

When you play DVDs that allow you to select items such as language for the sound and subtitles, select these items using the MENU button.



1 Press TOP MENU or MENU.

The disc's menu appears on the TV screen.

The contents of the menu vary from disc to disc.

2 Press ←/↑/↓/→ or the number buttons to select the item you want to play or change.

If you press the number buttons, the following display appears.

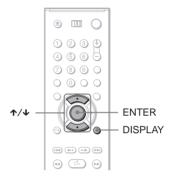
Press the number buttons to select the item you want.



3 Press ENTER.

Selecting "ORIGINAL" or "PLAY LIST" on a DVD-RW/DVD-R DVDva

Some DVD-RWs/DVD-Rs in VR (Video Recording) mode have two types of titles for playback: originally recorded titles (ORIGINAL) and titles that can be created on recordable DVD players for editing (PLAY LIST). You can select the type of title to be played.

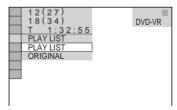


1 Press DISPLAY when the player is in stop mode.

The Control Menu appears.

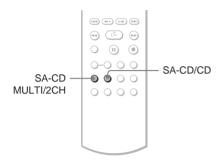
2 Press ↑/↓ to select 「□□□ (ORIGINAL/PLAY LIST), then press ENTER.

The options for "ORIGINAL/PLAY LIST" appear.



- **3** Press \uparrow / \downarrow to select a setting.
 - PLAY LIST: plays the titles created from "ORIGINAL" for editing.
 - ORIGINAL: plays the titles originally recorded.
- 4 Press ENTER.

Selecting a Playback Area for a Super Audio CD CDSUPER



Selecting a playback area on a 2 channel + Multi-channel Super Audio CD

Some Super Audio CDs consist of a 2 channel playback area and a multi-channel playback area. You can select the playback area you want to listen to.

1 Press SA-CD MULTI/2CH when the player is in stop mode.

The following display appears.



- 2 Press SA-CD MULTI/2CH repeatedly to select the item.
 - MULTI: plays a multi-channel playback area.
 - 2CH: plays a 2 channel playback area.

The MULTI CHANNEL indicator in the front panel display lights up when playing a multi-channel playback area.

Selecting a playback layer when playing a hybrid Super Audio CD

Some Super Audio CDs consist of an HD layer and a CD layer. You can select the playback layer you want to listen to.

Press SA-CD/CD when the player is in stop mode.

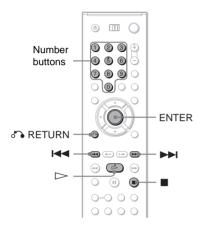
Each time you press the button, an HD layer or a CD layer is alternately selected. When playing a CD layer, the "CD" indicator in the front panel display lights up.

Notes

- For details about Super Audio CD discs, see page 83.
- Each play mode function works only within the selected layer or playback area.

Playing VIDEO CDs With PBC Functions (PBC Playback)

PBC (Playback Control) allows you to play VIDEO CDs interactively by following the menu on the TV screen.



1 Start playing a VIDEO CD with PBC functions.

The menu for your selection appears.

- 2 Press the number buttons to select the item number you want.
- 3 Press ENTER.
- 4 Follow the instructions in the menu for interactive operations.

Refer to the instructions supplied with the disc, as the operating procedure may differ depending on the VIDEO CD.

To return to the menu Press RETURN.

Ϋ́ Hint

To play without using PBC, press I◀◀/▶▶I or the number buttons while the player is stopped to select a track, then press ▷ or ENTER.

"Play without PBC" appears on the TV screen and the player starts continuous play. You cannot play still pictures such as a menu.

To return to PBC playback, press ■ twice then press ▷.

Note

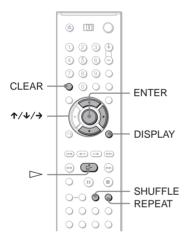
Depending on the VIDEO CD, "Press ENTER" in step 3 may appear as "Press SELECT" in the instructions supplied with the disc. In this case, press ▷.

Various Play Mode Functions (Program Play,

Shuffle Play, Repeat Play, A-B Repeat Play)

You can set the following play modes:

- Program Play (page 34)
- Shuffle Play (page 36)
- Repeat Play (page 36)
- A-B Repeat Play (page 37)



Note

The play mode is canceled when:

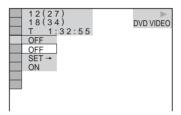
- you open the disc tray.
- the player enters standby mode by pressing 1/0.

Creating your own program (Program Play) DVDvideo VCD CDsuper CD

You can play the contents of a disc in the order you want by arranging the order of the titles, chapters or tracks on the disc to create your own program. You can program up to 99 titles, chapters and tracks.

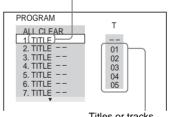
- Press DISPLAY.
 The Control Menu appears.
- Press ↑/↓ to select [] (PROGRAM), then press ENTER.

 The options for "PROGRAM" appear.



3 Press ★/♣ to select "SET →," then press ENTER.

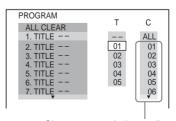
"TRACK" is displayed when you play a VIDEO CD, Super Audio CD or CD.



Titles or tracks recorded on a disc

4 Press →.

The cursor moves to the title or track row "T" (in this case, "01").



Chapters recorded on a disc

5 Select the title, chapter or track you want to program.

♦ When playing a DVD VIDEO

For example, select chapter "03" of title "02."

Press \uparrow / \downarrow to select "02" under "T," then press ENTER.

PROGRAM	. т	С
ALL CLEAR		
1. TITLE		ALL
2. TITLE	01	01
3. TITLE	02	02
4. TITLE	03	03
5. TITLE	04	04
6. TITLE	05	05
7. TITLĘ		06

Next, press **↑**/**↓** to select "03" under "C," then press ENTER.

PROGRAM	T
ALL CLEAR 1. TITLE (02-03) 2. TITLE 3. TITLE 4. TITLE 5. TITLE 6. TITLE 7. TITLE	T 01 02 03 04 05
7.11124	

Selected title and chapter

◆ When playing a VIDEO CD, Super Audio CD or CD

For example, select track "02." Press ↑/♦ to select "02" under "T," then press ENTER. The track number may be displayed in 3 digits for a Super Audio CD.

Selected track

PROGRAM		0:15:30
ALL CLEAR		ı ^т
1. TRACK	(02)	
2. TRACK		01
3. TRACK		02
4. TRACK		03
5. TRACK		04
6. TRACK		05
7. TRACK		
,		

Total time of the programmed tracks

6 To program other titles, chapters or tracks, repeat steps 4 to 5.

The programmed titles, chapters and tracks are displayed in the selected order.

7 Press ⊳ to start Program Play.

Program Play begins.

When the program ends, you can restart the same program again by pressing ▷.

To return to normal play

Press CLEAR or select "OFF" in step 3. To play the same program again, select "ON" in step 3 and press ENTER.

To change or cancel a program

- Follow steps 1 to 3 of "Creating your own program (Program Play)."
- 2 Select the program number of the title, chapter or track you want to change or cancel using ↑/↓ and press →. If you want to delete the title, chapter or track from the program, press CLEAR.
- **3** Follow step 5 for new programming. To cancel a program, select "--" under "T," then press ENTER.

To cancel all of the titles, chapters or tracks in the programmed order

- 1 Follow steps 1 to 3 of "Creating your own program (Program Play)."
- 2 Press ↑ and select "ALL CLEAR."
- 3 Press ENTER.

Ϋ́ Hint

You can perform Repeat Play or Shuffle Play of programmed titles, chapters or tracks. During Program Play, follow the steps of Repeat Play (page 36) or Shuffle Play (page 36).

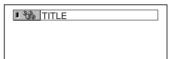
Notes

- When you program tracks on a Super VCD, the total playing time is not displayed.
- You cannot use this function with VIDEO CDs or Super VCDs with PBC playback.

Playing in random order (Shuffle Play) DVDVideo VCD CDSuper CD

You can have the player "shuffle" titles, chapters or tracks. Subsequent "shuffling" may produce a different playing order.

1 Press SHUFFLE during playback. The following display appears.



- 2 Press SHUFFLE repeatedly to select the item to be shuffled.
 - ♦ When playing a DVD VIDEO
 - TITLE
 - CHAPTER
 - ◆ When playing a VIDEO CD, Super Audio CD or CD
 - TRACK
 - ◆ When Program Play is activated
 - ON: shuffles titles, chapters or tracks selected in Program Play.

To return to normal play

Press CLEAR or select "OFF" in step 2.

Ϋ́ Hints

- You can set Shuffle Play while the player is stopped. After selecting the "SHUFFLE" option, press ▷. Shuffle Play starts.
- Up to 200 chapters in a disc can be played in random order when "CHAPTER" is selected.

Note

You cannot use this function with VIDEO CDs or Super VCDs with PBC playback.

Playing repeatedly (Repeat Play)

DVDvideo DVDvR VCD CDsuper CD DATA CD

DATA DVD

You can play all of the titles or tracks on a disc, or a single title, chapter or track repeatedly.

You can use a combination of Shuffle or Program Play modes.

- 1 Press REPEAT during playback. The following display appears.
- 2 Press REPEAT repeatedly to select the item to be repeated.
 - ♦ When playing a DVD VIDEO
 - DISC: repeats all of the titles.
 - TITLE: repeats the current title on a disc.
 - CHAPTER: repeats the current chapter.
 - ◆ When playing a DVD-VR mode disc
 - DISC: repeats all the titles of the selected type.
 - TITLE: repeats the current title on a disc.
 - CHAPTER: repeats the current chapter.
 - \spadesuit When playing a VIDEO CD, Super Audio CD or CD
 - DISC: repeats all of the tracks.
 - TRACK: repeats the current track.
 - ◆ When playing a DATA CD or DATA DVD with MP3 audio tracks or JPEG image files
 - DISC: repeats all of the albums.
 - ALBUM: repeats the current album.
 - TRACK (MP3 audio tracks only): repeats the current track.
 - When Program Play or Shuffle Play is activated
 - ON: repeats Program Play or Shuffle Play.

To return to normal play

Press CLEAR or select "OFF" in step 2.

ΰ Hint

You can set Repeat Play while the player is stopped. After selecting the "REPEAT" option, press ▷. Repeat Play starts.

Notes

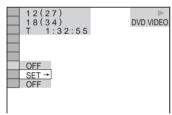
- You cannot use this function with VIDEO CDs or Super VCDs with PBC playback.
- When repeating a DATA CD/DATA DVD which contains MP3 audio tracks and JPEG image files, and their playing times are not the same, the sound will not match the image.
- When "MODE (MP3, JPEG)" is set to "IMAGE (JPEG)" (page 60), you cannot select "TRACK."

Repeating a specific portion (A-B Repeat Play)

DVDvideo DVDvR VCD CD

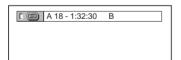
You can play a specific portion of a title, chapter or track repeatedly. (This function is useful when you want to memorize lyrics, etc.)

- 1 Press DISPLAY during playback.
 The Control Menu appears.



3 Press ★/→ to select "SET →," then press ENTER.

The "A-B REPEAT" setting bar appears.



During playback, when you find the starting point (point A) of the portion to be played repeatedly, press ENTER. The starting point (point A) is set.



When you reach the ending point (point B), press ENTER again.

The set points are displayed and the player starts repeating this specific portion.

To return to normal play

Press CLEAR or select "OFF" in step 3.

Notes

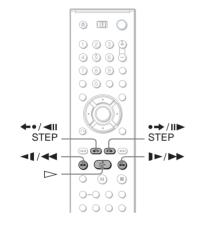
- When you set A-B Repeat Play, the settings for Shuffle Play, Repeat Play and Program Play are canceled.
- A-B Repeat Play does not work across multiple titles.
- You may not set A-B Repeat Play for contents on a DVD-RW/DVD-R (VR mode) that contains still pictures.

Searching for a Scene

Searching for a Particular Point on a

Disc (Search, Scan, Slow-motion Play, Freeze Frame)

You can quickly locate a particular point on a disc by monitoring the picture or playing back slowly.





Notes

- Depending on the disc, you may not be able to do some of the operations described.
- For DATA CDs/DATA DVDs, you can search for a particular point only on an MP3 audio track.

Locating a point quickly using the PREV (previous)/NEXT (next) buttons (Search)

DVDvideo DVDvR VCD CDsuper CD DATA CD

You can search for the next or previous chapter, track or scene using ► on the player.

During playback, press ► or ← once briefly to go to the next or previous chapter/ track/scene. Or, press and hold ► or ← to search forward or backwards and release the button when you find the point you want to return to normal playback. (Search)

Locating a point quickly by playing a disc in fast forward or fast reverse (Scan)

DVDvideo DVDvR VCD CDsuper CD DATA CD

Press ◀▮ ◀◀ or ▶▶ ▶ while playing a disc. When you find the point you want, press ▷ to return to normal speed. Each time you press ◀▮ ◀◀ or ▶▶ during scan, the scan speed changes. With each press the indication changes as shown below. Actual speeds may differ between discs.

Playback direction



Opposite direction



The "×2▶"/ "×2◀" playback speed is about twice the normal speed.

The "3▶"/"3◄" playback speed is faster than "2▶"/"2◄" and the "2▶"/"2◄" playback speed is faster than "1▶"/
"1◄."

Watching frame by frame (Slow-motion Play)

DVDvideo DVDvR VCD

Press ◀▮ ◀◀ or ▶▶ ▶ when the player is in pause mode. To return to normal speed, press >.

Each time you press ◀▮ ◀◀ or ▶▶ ▮▶ during Slow-motion Play, the playback speed changes. Two speeds are available. With each press the indication changes as follows:

Playback direction

Opposite direction (DVD/DVD-VR mode only)

The "2 ▶"/"2 ◀¶" playback speed is slower than "1 **▶**"/"1 **◄1**."

Playing one frame at a time (Freeze Frame) DVDvideo DVDvR VCD

When the player is in the pause mode, press •→ II► STEP to go to the next frame. Press **←• ◄II** STEP to go to the preceding frame (DVD/DVD-VR mode only). To return to normal playback, press .

Note

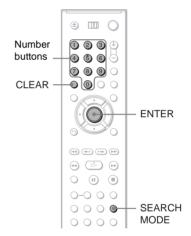
You cannot search for a still picture on a DVD-RW/ DVD-R in VR mode.

Searching for a Title/ Chapter/Track/Scene, etc. (Search mode)

DVDvideo DVDvR VCD CDsuper CD

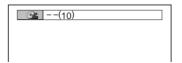
DATA CD DATA DVD

You can search a DVD by title or chapter, and you can search a VIDEO CD/Super Audio CD/CD/DATA CD/DATA DVD by track, index or scene. As titles and tracks are assigned unique numbers on the disc, you can select the desired one by entering its number. You can also search for a scene using the time code.



1 Press SEARCH MODE.

The following display appears. "-- (**)" appears next to the icon (** refers to a number). The number in parentheses indicates the total number of titles, tracks, indexes, scenes, etc., of the disc.



2 Press SEARCH MODE repeatedly to select a search method.

◆ When playing a DVD VIDEO/DVD-VR mode disc

TITLE

CHAPTER

ITIME/TEXT

Select "TIME/TEXT" to search for a starting point by inputting the time code.

♦ When playing a VIDEO CD or Super VCD without PBC Playback

TRACK
INDEX

♦ When playing a VIDEO CD or Super VCD with PBC Playback

SCENE

◆ When playing a Super Audio CD/CD

■ TRACK

♦ When playing a DATA CD/DATA DVD

[G] ALBUM

TRACK (MP3 audio tracks only)

FILE (JPEG image files only)

3 Select the number of the title, track, scene, time code, etc. you want by pressing the number buttons to select the digit.

◆ When you select ☐ TIME/TEXT For example, to find the scene at 2 hours, 10 minutes, and 20 seconds after the beginning, enter "21020."

♦ If you make a mistake Cancel the number by pressing CLEAR, then select another number.

4 Press ENTER.

The player starts playback from the selected number.

To turn off the display

Press SEARCH MODE repeatedly until the display is turned off.

Ϋ Hints

- When the Control Menu display is turned off, you
 can search for a chapter (DVD VIDEO/DVD-VR
 mode) or track (Super Audio CD/CD/DATA CD/
 DATA DVD) by pressing the number buttons and
 ENTER.
- You can display the first scene of titles, chapters or tracks recorded on the disc on a screen divided into 9 sections. You can start playback directly by selecting one of the scenes. For details, see "Searching by Scene (PICTURE NAVIGATION)" (page 41).

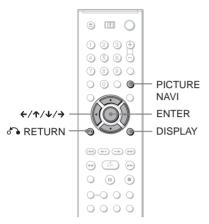
Notes

- The title, chapter or track number displayed is the same number recorded on the disc.
- You cannot search for a scene on a DVD+RW/ DVD+R using the time code.

Searching by Scene

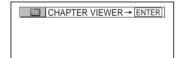
(PICTURE NAVIGATION) DVDvideo VCD

You can divide the screen into 9 subscreens and find the desired scene quickly.



Press PICTURE NAVI during playback.

The following display appears.



2 Press PICTURE NAVI repeatedly to select an item.

- CHAPTER VIEWER (DVD VIDEO only): displays the first scene of each chapter.
- TITLE VIEWER (DVD VIDEO only): displays the first scene of each title.
- TRACK VIEWER (VIDEO CD/ Super VCD only): displays the first scene of each track.

3 Press ENTER.

The first scene of each chapter, title or track appears as follows.

1	2	3	
4	5	6	
7	8	9	•

4 Press ←/↑/↓/→ to select a chapter, title or track, and press ENTER.

Playback starts from the selected scene.

To return to normal play during setting Press RETURN or DISPLAY.

უ⊓ Hint

If there are more than 9 chapters, titles or tracks, \blacktriangledown is displayed at the bottom right of the screen. To display the additional chapters, titles or tracks, select the bottom scenes and press \blacktriangledown . To return to the previous scene, select the top scenes and press

Note

Depending on the disc, you may not be able to select some items.

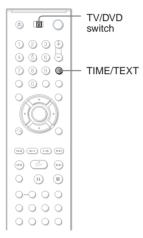
Viewing Information About the Disc

Checking the Playing Time and Remaining

Time DVDvideo DVDvR VCD CDSuper

CD DATA CD DATA DVD

You can check the playing time and remaining time of the current title, chapter or track. Also, you can check the DVD/Super Audio CD/CD text or track name (MP3 audio) recorded on the disc.



1 Make sure that the TV/DVD switch is set to DVD. Press TIME/TEXT during playback.

The following display appears.



2 Press TIME/TEXT repeatedly to change the time information.

The available time information depends upon the type of disc you are playing.

◆ When playing a DVD VIDEO or DVD-VR mode disc

- T *:*:* (hours: minutes: seconds)
 Playing time of the current title
- T-*:*:*
 Remaining time of the current title
- C *:*:* Playing time of the current chapter
- C-*:*:*
 Remaining time of the current chapter
- ♦ When playing a VIDEO CD or Super VCD (with PBC functions)
- *:* (minutes: seconds)

 Playing time of the current scene
- ♦ When playing a VIDEO CD (without PBC functions), Super Audio CD or CD
- T *:* (minutes: seconds)
 Playing time of the current track
 T-*:*
- T-*:*
 Remaining time of the current track
- D *:* Playing time of the current disc
- D-*:*
 Remaining time of the current disc
- ◆ When playing a Super VCD (without PBC functions)
- T *:* (minutes: seconds)
 Playing time of the current track
- ◆ When playing a DATA CD or DATA DVD (MP3 audio)
- T *:* (minutes: seconds)
 Playing time of the current track

Checking the play information of the disc

To check the DVD/Super Audio CD/CD text Press TIME/TEXT repeatedly in step 2 to display text recorded on the DVD/Super

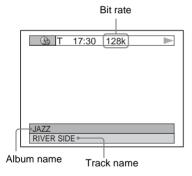
The DVD/Super Audio CD/CD text appears only when text is recorded in the disc. You cannot change the text. If the disc does not contain text, "NO TEXT" appears.

Audio CD/CD.



To check DATA CD/DATA DVD (MP3 audio) album name, etc.

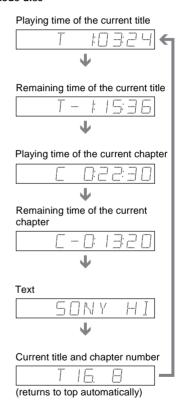
By pressing TIME/TEXT while playing MP3 audio tracks on a DATA CD/DATA DVD, you can display the name of the album/track and the audio bit rate (the amount of data per second of the current audio track) on your TV screen.



Checking the information on the front panel display

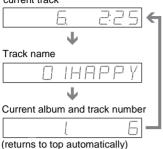
You can view the time information and text displayed on the TV screen also on the front panel display. The information on the front panel display changes as follows when you change the time information on your TV

When playing a DVD VIDEO or DVD-VR mode disc



When playing a DATA CD/DATA DVD (MP3 audio)

Playing time and number of the current track



When playing a VIDEO CD (without PBC functions), Super Audio CD or CD

Playing time and number of the current track



- *1 When playing a Super Audio CD, the current track is not displayed.
- *2 The current track and index appear only when playing a VIDEO CD or Super Audio CD.

"Ö Hints

- When playing VIDEO CDs without PBC functions, the track number and the index number are displayed after the text.
- When playing VIDEO CDs with PBC functions, the scene number or the playing time are displayed.
- Long text that does not fit in a single line will scroll across the front panel display.
- You can also check the time information and text using the Control Menu (page 14).

Notes

- Depending on the type of disc being played, the disc text or track name may not be displayed.
- The player can only display the first level of the disc text, such as the disc name or title.
- Playing time of MP3 audio tracks may not be displayed correctly.
- If you play a disc containing JPEG image files only, "NO AUDIO DATA" appears when "MODE (MP3, JPEG)" is set to "AUTO," "JPEG" appears when "MODE (MP3, JPEG)" is set to "IMAGE (JPEG)" in the front panel display.